

**Quinton Township School District  
Mathematics  
Grade 6**

**Pacing Chart/Curriculum MAP**

<b>Marking Period:</b>	1	<b>Unit Title:</b>	<b>Numerical Expressions and Factors</b>	<b>Pacing:</b>	September Weeks 1 and 2
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**Unit Summary:** This unit will enable students to evaluate expressions using Order of Operations. While evaluating these expressions, students will use whole number operations, powers, and exponents. Students will be able to determine relationships between numbers using prime factorization, greatest common factor, and least common multiple.

**Objectives:** Students will be able to:

- determine which operation to perform.
- divide multi-digit numbers.
- write expressions as powers.
- find values of powers.
- evaluate numerical expressions with whole-number exponents.
- use divisibility rules to find prime factorizations of numbers.
- use diagrams to identify common factors.
- find the greatest common factor.
- use diagrams to identify common multiples.
- find the least common multiple.
- use least common multiples to add and subtract fractions.

**Essential Questions:**

- How do you know which operation to choose when solving a real-life problem?
- How can you use repeated factors in real-life situations?
- What is the effect of inserting parentheses into a numerical expression?
- Without dividing, how can you tell when a number is divisible by another number?
- How do you find the greatest common factor of two numbers?
- How can you find the least common multiple of two numbers?

**Common Core State Standards/Learning Targets:**

- 6.NS.B.2: Fluently divide multi-digit numbers using the standard algorithm.
- 6.NS.B.4: Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor.
- 6.EE.A.1: Write and evaluate numerical expressions involving whole-number exponents.
- 6.EE.A.2: Write, read, and evaluate expressions in which letters stand for numbers.
  - 6.EE.A.2.B: Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity.

**Interdisciplinary Connections/Including 21st Century Themes and Skills:**

21st Century Career Ready Practices:

CRP2. Apply appropriate academic and technical skills.

CRP4. Communicate clearly and effectively and with reason.

CRP5. Consider the environmental, social and economic impacts of decisions.

CRP6. Demonstrate creativity and innovation.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

Geography: 1.1- Using a map to identify the Great Lakes.

LAL: 1.1- Students create their own St. Ives Poem to extend their knowledge of powers.

Overview of Activities	Teacher's Guide/ Resources	Core Instructional Materials	Technology Infusion
<p>1.1 Whole Number Operations            1.2 Powers and Exponents            1.3 Order of Operations            1.4 Prime Factorization            1.5 Greatest Common Factor            1.6 Least Common Multiple</p>	<p>Curriculum Map            Teacher's Guide Chapter 1 p.1-51            Big Ideas website            Desmos.com            IXL            Prime Number Chart</p>	<p>Student Textbook            p.1-51             Record and Practice            Journal            p. 1-28             Graph Paper</p>	<ul style="list-style-type: none"> <li>● Smart Board Applications</li> <li>● Google Applications</li> <li>● BigIdeasMath.com</li> <li>● ixl.com               <ul style="list-style-type: none"> <li>○ A.5, A.6</li> <li>○ B.1-B.8</li> <li>○ C.1-C.6</li> <li>○ D.1-D.5</li> <li>○ E.3-E.9</li> <li>○ J.1-J.9</li> <li>○ O.3</li> </ul> </li> </ul>

Formative Assessment Plan	Summative Assessment Plan
<p><i>Formative assessment informs instruction and is on going through a unit to determine how students are progressing with the high expectations of standards.</i></p> <p><b>Suggested activities to assess student progress:</b>            Weekly Homework Completion            Classwork &amp; Basic Skill Practice</p>	<p><i>Summative assessment is an opportunity for students to demonstrate mastery of the skills taught during a particular unit.</i></p> <p><b>Final Assessment/Benchmark/Project:</b>            1.1-1.3 Mid Quiz            1.4-1.6 End Quiz</p>

<p>Corrections &amp; Reflections          Divisibility Rules Foldable          Divisibility Rules Quiz          BigIdeasMath.com daily assessments          Kahoot/Quizizz daily assessments          Self-reflection</p>	<p>Favorite Number Project          Chapter 1 Test          Chapter 1 Standards Assessment          Fall MAP Benchmark Assessment</p> <p><b>Suggested skills to be assessed:</b>          Using whole number operations. Evaluating powers and exponents.          Evaluating expressions using Order of Operations. Determining the Prime Factorization of a number. Determining the Greatest Common Factor and Least Common Multiple between two numbers.</p>
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**Differentiation**

Special Education	ELL	At Risk	Gifted and Talented
<ul style="list-style-type: none"> <li>• RTI</li> <li>• Modify and accommodate as listed in student's IEP or 504 plan</li> <li>• Utilize effective amount of wait time</li> <li>• Hold high expectations</li> <li>• Communicate directions clearly and concisely and repeat, reword, modify as necessary.</li> <li>• Utilize open-ended questioning techniques</li> <li>• Utilize scaffolding to support instruction.</li> </ul>	<ul style="list-style-type: none"> <li>• RTI</li> <li>• Speech/Language Therapy</li> <li>• Rosetta Stone</li> <li>• Hold high expectations</li> <li>• Provide English/Spanish Dictionary for use</li> <li>• Place with Spanish speaking teacher/paraprofessional as available</li> <li>• Learn/Utilize/Display some words in the students' native language</li> <li>• Invite student to after school tutoring sessions</li> <li>• Basic Skills Instruction</li> </ul>	<ul style="list-style-type: none"> <li>• RTI Tiered Interventions following RTI framework</li> <li>• Support instruction with RTI intervention resources</li> <li>• Provide after school tutoring services</li> <li>• Basic Skills Instruction</li> <li>• Hold high expectations</li> <li>• Utilize Go Math! RTI strategies</li> <li>• Fountas and Pinnell Phonics</li> <li>• Hold parent conferences fall and spring</li> <li>• Make modifications to instructional plans based on I and RS Plan.</li> </ul>	<ul style="list-style-type: none"> <li>• Organize the curriculum to include more elaborate, complex, and in-depth study of major ideas and problems through Compacting.</li> <li>• Allow for the development and application of productive thinking skills to enable students to re-conceptualize existing knowledge and/or generate new knowledge.</li> <li>• Enable students to explore continually changing knowledge and information</li> </ul>

<ul style="list-style-type: none"> <li>• Chunk tasks into smaller components</li> <li>• Provide step by step instructions</li> <li>• Model and use visuals as often as possible</li> <li>• Utilize extended time and/or reduce amount of items given for homework, quizzes, and tests.</li> <li>• Teach Tiers 1,2, and 3 words to assist students' understanding of instructional texts.</li> <li>• Utilize a variety of formative assessments to drive next point of instruction/differentiated instructional practices.</li> <li>• Create rubrics/allow students to assist with task, so that all are aware of expectations.</li> <li>• Create modified assessments.</li> <li>• Allow students to utilize online books, when available, to listen to oral recorded reading.</li> <li>• Provide individualized assistance as necessary.</li> <li>• Allow for group work (strategically selected) and collaboration as necessary.</li> <li>• Utilize homework recorder within SIS.</li> <li>• Allow for copies of notes to be shared out.</li> <li>• Utilize assistive technology as appropriate.</li> <li>• Provide meaningful feedback and utilize teachable moments.</li> <li>• Utilize graphic organizers</li> </ul>	<ul style="list-style-type: none"> <li>• Utilize formative assessments to drive instruction</li> <li>• Translate printed communications for parents in native language</li> <li>• Hold conferences with translator present</li> <li>• Utilize additional NJDOE resources/recommendations</li> <li>• Review Special Education listing for additional recommendations</li> <li>• Establish a consistent and daily routine</li> </ul>	<ul style="list-style-type: none"> <li>• Develop a record system to encourage good behavior and completion of work.</li> <li>• Establish a consistent and daily routine.</li> </ul>	<p>and develop the attitude that knowledge is worth pursuing in an open world.</p> <ul style="list-style-type: none"> <li>• Encourage exposure to, selection and use of appropriate and specialized resources.</li> <li>• Promote self-initiated and self-directed learning and growth.</li> <li>• Provide for the development of self-understanding of one's relationships with people, societal institutions, nature and culture.</li> <li>• Continue to offer Accelerated Mathematics 7 (7th grade) and Algebra 1 (8th grade).</li> </ul>
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| <ul style="list-style-type: none"><li>• <b>Introduce/review study skills</b></li><li>• <b>Provide reading material at or slightly above students' reading levels.</b></li><li>• <b>Utilize manipulatives as necessary.</b></li><li>• <b>Utilize auditory reminders as deemed necessary.</b></li><li>• <b>Provide breaks to allow for refocusing as necessary.</b></li><li>• <b>Establish a consistent and daily routine.</b></li></ul> |  |  |  |
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**Quinton Township School District  
Mathematics  
Grade 6**

**Pacing Chart/Curriculum MAP**

<b>Marking Period:</b>	1	<b>Unit Title:</b>	<b>Fractions and Decimals</b>	<b>Pacing:</b>	September Week 3 October Weeks 1- 3
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**Unit Summary:** During this unit, students discover algorithms to perform operations with fractions and decimals using models. They are able to utilize these algorithms to evaluate expressions.

**Objectives:** Students will be able to:

- use models to multiply fractions.
- multiply fractions by fractions.
- write reciprocals of numbers.
- use models to divide fractions.
- divide fractions by fractions.
- use models to divide mixed numbers.
- divide mixed numbers.
- use models to add and subtract decimals.
- add and subtract decimals.
- use models to multiply decimals.

- multiply decimals.
- use models to divide decimals.
- divide decimals.
- solve real-life problems.

**Essential Questions:**

- What does it mean to multiply fractions?
- How can you divide by a fraction?
- How can you add and subtract decimals?
- How can you multiply decimals?
- How can you divide decimals?

**Common Core State Standards/Learning Targets:**

- 6.NS.A.1: Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem.
- 6.NS.B.3: Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.

**Interdisciplinary Connections/Including 21st Century Themes and Skills:**

21st Century Career Ready Practices:

CRP2. Apply appropriate academic and technical skills.

CRP4. Communicate clearly and effectively and with reason.

CRP6. Demonstrate creativity and innovation.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

LAL: 2.3 - Student create create division stories involving mixed numbers.

History: 2.4 - Discuss the history of the Lincoln Memorial Reflecting Pool



Overview of Activities	Teacher's Guide/ Resources	Core Instructional Materials	Technology Infusion
<p>2.1 Multiplying Fractions            2.2 Dividing Fractions            2.3 Dividing Mixed Numbers            2.4 Adding and Subtracting Decimals            2.5 Multiplying Decimals            2.6 Dividing Decimals</p>	<p>Curriculum Map            Teacher's Guide Chapter 2 p.52-107            Big Ideas website            Desmos.com            IXL</p>	<p>Student Textbook            p.52-107             Record and Practice            Journal            p. 29-54             Graph Paper</p>	<ul style="list-style-type: none"> <li>● Smart Board Applications</li> <li>● Google Applications</li> <li>● BigIdeasMath.com</li> <li>● ixl.com               <ul style="list-style-type: none"> <li>○ G.1-G.4</li> <li>○ H.1-H.8</li> <li>○ K.1-K.13</li> <li>○ L.1-L.8</li> </ul> </li> </ul>

Formative Assessment Plan	Summative Assessment Plan
<p><i>Formative assessment informs instruction and is on going through a unit to determine how students are progressing with the high expectations of standards.</i></p> <p><b>Suggested activities to assess student progress:</b>            Weekly Homework Completion            Classwork &amp; Basic Skill Practice            Corrections &amp; Reflections            BigIdeasMath.com daily assessments            Kahoot/Quizizz daily assessments            Self-reflection</p>	<p><i>Summative assessment is an opportunity for students to demonstrate mastery of the skills taught during a particular unit.</i></p> <p><b>Final Assessment/Benchmark/Project:</b>            2.1-2.3 Mid Quiz            2.4-2.6 End Quiz            Chapter 2 Test            Chapter 2 Standards Assessment</p>

**Suggested skills to be assessed:**

Multiply and divide fractions and mixed numbers. Operations with decimals.

### Differentiation

Special Education	ELL	At Risk	Gifted and Talented
<ul style="list-style-type: none"> <li>• RTI</li> <li>• Modify and accommodate as listed in student's IEP or 504 plan</li> <li>• Utilize effective amount of wait time</li> <li>• Hold high expectations</li> <li>• Communicate directions clearly and concisely and repeat, reword, modify as necessary.</li> <li>• Utilize open-ended questioning techniques</li> <li>• Utilize scaffolding to support instruction.</li> <li>• Chunk tasks into smaller components</li> <li>• Provide step by step instructions</li> <li>• Model and use visuals as often as possible</li> <li>• Utilize extended time and/or reduce amount of items given for homework, quizzes, and</li> </ul>	<ul style="list-style-type: none"> <li>• RTI</li> <li>• Speech/Language Therapy</li> <li>• Rosetta Stone</li> <li>• Hold high expectations</li> <li>• Provide English/Spanish Dictionary for use</li> <li>• Place with Spanish speaking teacher/paraprofessional as available</li> <li>• Learn/Utilize/Display some words in the students' native language</li> <li>• Invite student to after school tutoring sessions</li> <li>• Basic Skills Instruction</li> <li>• Utilize formative assessments to drive instruction</li> <li>• Translate printed communications for parents in native language</li> <li>• Hold conferences with translator present</li> <li>• Utilize additional NJDOE resources/recommendations</li> <li>• Review Special Education listing for additional</li> </ul>	<ul style="list-style-type: none"> <li>• RTI Tiered Interventions following RTI framework</li> <li>• Support instruction with RTI intervention resources</li> <li>• Provide after school tutoring services</li> <li>• Basic Skills Instruction</li> <li>• Hold high expectations</li> <li>• Utilize Go Math! RTI strategies</li> <li>• Fountas and Pinnell Phonics</li> <li>• Hold parent conferences fall and spring</li> <li>• Make modifications to instructional plans based on I and RS Plan.</li> <li>• Develop a record system to encourage good behavior and completion of work.</li> <li>• Establish a consistent and daily routine.</li> </ul>	<ul style="list-style-type: none"> <li>• Organize the curriculum to include more elaborate, complex, and in-depth study of major ideas and problems through Compacting.</li> <li>• Allow for the development and application of productive thinking skills to enable students to re-conceptualize existing knowledge and/or generate new knowledge.</li> <li>• Enable students to explore continually changing knowledge and information and develop the attitude that knowledge is worth pursuing in an open world.</li> <li>• Encourage exposure to, selection and use of appropriate and specialized resources.</li> <li>• Promote self-initiated and self-directed learning and growth.</li> </ul>

<p>tests.</p> <ul style="list-style-type: none"> <li>• Teach Tiers 1,2, and 3 words to assist students' understanding of instructional texts.</li> <li>• Utilize a variety of formative assessments to drive next point of instruction/differentiated instructional practices.</li> <li>• Create rubrics/allow students to assist with task, so that all are aware of expectations.</li> <li>• Create modified assessments.</li> <li>• Allow students to utilize online books, when available, to listen to oral recorded reading.</li> <li>• Provide individualized assistance as necessary.</li> <li>• Allow for group work (strategically selected) and collaboration as necessary.</li> <li>• Utilize homework recorder within SIS.</li> <li>• Allow for copies of notes to be shared out.</li> <li>• Utilize assistive technology as appropriate.</li> <li>• Provide meaningful feedback and utilize teachable moments.</li> <li>• Utilize graphic organizers</li> <li>• Introduce/review study skills</li> <li>• Provide reading material at or slightly above students' reading levels.</li> <li>• Utilize manipulatives as necessary.</li> <li>• Establish a consistent and daily routine</li> </ul>	<p>recommendations</p> <ul style="list-style-type: none"> <li>• Establish a consistent and daily routine</li> </ul>		<ul style="list-style-type: none"> <li>• Provide for the development of self-understanding of one's relationships with people, societal institutions, nature and culture.</li> <li>• Continue to offer Accelerated Mathematics 7 (7th grade) and Algebra 1 (8th grade).</li> </ul>
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**Quinton Township School District  
Mathematics  
Grade 6**

**Pacing Chart/Curriculum MAP**

<b>Marking Period:</b>	1	<b>Unit Title:</b>	<b>Algebraic Expressions and Properties</b>	<b>Pacing:</b>	October Weeks 4-5 November Weeks 1- 3
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**Unit Summary:** This unit will expose students to algebraic expressions which will form the building blocks for courses in Algebra. They will understand the parts of an algebraic expression and how to simplify those expressions. These skills will prepare students for solving equations.

**Objectives:** Students will be able to:

- use order of operations to evaluate algebraic expressions.
- solve real-life problems.
- use variables to represent numbers in algebraic expressions.
- write algebraic expressions.
- use properties of operations to generate equivalent expressions.
- use the Distributive Property to find products.
- use the Distributive Property to simplify algebraic expressions.

**Essential Questions:**

- How can you write and evaluate an expression that represents a real-life problem?
- How can you write an expression that represents an unknown quantity?
- Does the order in which you perform a operation matter?
- How do you use mental math to multiply two numbers?

**Common Core State Standards/Learning Targets:**

- 6.NS.B.4: Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor.
- 6.EE.A.2: Write, read, and evaluate expressions in which letters stand for numbers.
  - 6.EE.A.2.A: Write expressions that record operations with numbers and with letters standing for numbers.
  - 6.EE.A.2.B: Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity.
  - 6.EE.A.2.C: Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations).
- 6.EE.A.3: Apply the properties of operations to generate equivalent expressions.
- 6.EE.A.4: Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them).
- 6.EE.B.6: Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.

**Interdisciplinary Connections/Including 21st Century Themes and Skills:**

21st Century Life and Career Standards: 9.1.8.A.6 Explain how income affects spending decisions.

21st Century Career Ready Practices:

CRP2. Apply appropriate academic and technical skills.

CRP3. Attend to personal health and financial well-being.

CRP4. Communicate clearly and effectively and with reason.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

Geography: 3.2- Discuss the use of interstates and use a map to identify Interstate 90 and Interstate 15.

LAL: 3.2- Students identify key words and phrases.

<b>Overview of Activities</b>	<b>Teacher's Guide/ Resources</b>	<b>Core Instructional Materials</b>	<b>Technology Infusion</b>
<b>3.1</b> Algebraic Expressions <b>3.2</b> Writing Expressions <b>3.3</b> Properties of Addition and Multiplication <b>3.4</b> The Distributive Property	Curriculum Map Teacher's Guide Chapter 3 p.108-149 Big Ideas website Desmos.com IXL	Student Textbook p.108-149  Record and Practice Journal p. 55-74	<ul style="list-style-type: none"><li>● Smart Board Applications</li><li>● Google Applications</li><li>● Matching Action Game</li><li>● BigIdeasMath.com</li><li>● ixl.com<ul style="list-style-type: none"><li>○ Y.1-Y.11</li></ul></li></ul>

Formative Assessment Plan	Summative Assessment Plan
<p><i>Formative assessment informs instruction and is on going through a unit to determine how students are progressing with the high expectations of standards.</i></p> <p><b>Suggested activities to assess student progress:</b>            Expressions Foldable            Properties Foldable            Distributive Property Presents            Weekly Homework Completion            Classwork &amp; Basic Skill Practice            Corrections &amp; Reflections            BigIdeasMath.com daily assessments            Kahoot/Quizizz daily assessments            Self-reflection</p>	<p><i>Summative assessment is an opportunity for students to demonstrate mastery of the skills taught during a particular unit.</i></p> <p><b>Final Assessment/Benchmark/Project:</b>            3.1-3.2 Mid Quiz            3.3-3.4 End Quiz            Chapter 3 Test            Chapter 3 Standards Assessment</p> <p><b>Suggested skills to be assessed:</b>            Identifying parts of an algebraic expression. Writing and evaluating algebraic expressions. Simplifying expressions using properties.</p>

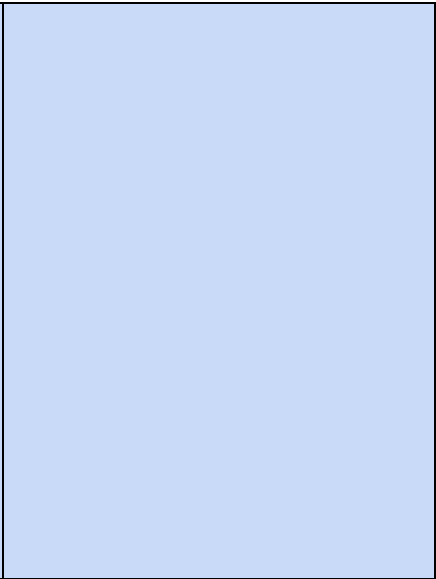
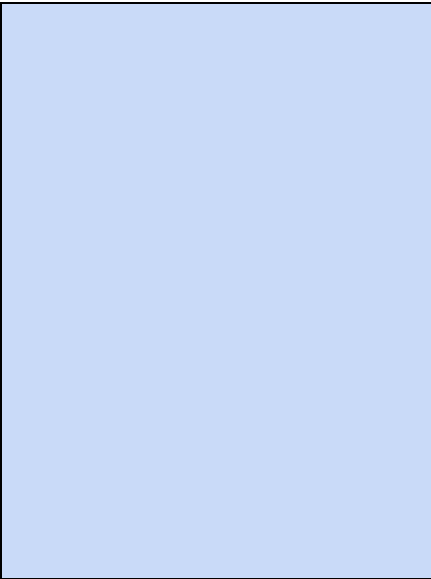
## Differentiation

Special Education	ELL	At Risk	Gifted and Talented
<ul style="list-style-type: none"> <li>• RTI</li> <li>• Modify and accommodate as listed in student's IEP or 504 plan</li> <li>• Utilize effective amount of</li> </ul>	<ul style="list-style-type: none"> <li>• RTI</li> <li>• Speech/Language Therapy</li> <li>• Rosetta Stone</li> <li>• Hold high expectations</li> <li>• Provide English/Spanish Dictionary for use</li> </ul>	<ul style="list-style-type: none"> <li>• RTI Tiered Interventions following RTI framework</li> <li>• Support instruction with RTI intervention resources</li> <li>• Provide after school tutoring services</li> </ul>	<ul style="list-style-type: none"> <li>• Organize the curriculum to include more elaborate, complex, and in-depth study of major ideas and problems through Compacting.</li> </ul>

<p>wait time</p> <ul style="list-style-type: none"> <li>● Hold high expectations</li> <li>● Communicate directions clearly and concisely and repeat, reword, modify as necessary.</li> <li>● Utilize open-ended questioning techniques</li> <li>● Utilize scaffolding to support instruction.</li> <li>● Chunk tasks into smaller components</li> <li>● Provide step by step instructions</li> <li>● Model and use visuals as often as possible</li> <li>● Utilize extended time and/or reduce amount of items given for homework, quizzes, and tests.</li> <li>● Teach Tiers 1,2, and 3 words to assist students' understanding of instructional texts.</li> <li>● Utilize a variety of formative assessments to drive next point of instruction/differentiated instructional practices.</li> <li>● Create rubrics/allow students to assist with task, so that all are aware of expectations.</li> <li>● Create modified assessments.</li> <li>● Allow students to utilize online books, when available, to listen to oral recorded reading.</li> <li>● Provide individualized assistance as necessary.</li> <li>● Allow for group work (strategically selected) and collaboration as necessary.</li> </ul>	<ul style="list-style-type: none"> <li>● Place with Spanish speaking teacher/paraprofessional as available</li> <li>● Learn/Utilize/Display some words in the students' native language</li> <li>● Invite student to after school tutoring sessions</li> <li>● Basic Skills Instruction</li> <li>● Utilize formative assessments to drive instruction</li> <li>● Translate printed communications for parents in native language</li> <li>● Hold conferences with translator present</li> <li>● Utilize additional NJDOE resources/recommendations</li> <li>● Review Special Education listing for additional recommendations</li> <li>● Establish a consistent and daily routine</li> </ul>	<ul style="list-style-type: none"> <li>● Basic Skills Instruction</li> <li>● Hold high expectations</li> <li>● Utilize Go Math! RTI strategies</li> <li>● Fountas and Pinnell Phonics</li> <li>● Hold parent conferences fall and spring</li> <li>● Make modifications to instructional plans based on I and RS Plan.</li> <li>● Develop a record system to encourage good behavior and completion of work.</li> <li>● Establish a consistent and daily routine.</li> </ul>	<ul style="list-style-type: none"> <li>● Allow for the development and application of productive thinking skills to enable students to re-conceptualize existing knowledge and/or generate new knowledge.</li> <li>● Enable students to explore continually changing knowledge and information and develop the attitude that knowledge is worth pursuing in an open world.</li> <li>● Encourage exposure to, selection and use of appropriate and specialized resources.</li> <li>● Promote self-initiated and self-directed learning and growth.</li> <li>● Provide for the development of self-understanding of one's relationships with people, societal institutions, nature and culture.</li> <li>● Continue to offer Accelerated Mathematics 7 (7th grade) and Algebra 1 (8th grade).</li> </ul>
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- Utilize homework recorder within SIS.
- Allow for copies of notes to be shared out.
- Utilize assistive technology as appropriate.
- Provide meaningful feedback and utilize teachable moments.
- Utilize graphic organizers
- Introduce/review study skills
- Provide reading material at or slightly above students' reading levels.
- Utilize manipulatives as necessary.
- Establish a consistent and daily routine



**Quinton Township School District  
Mathematics  
Grade 6**

**Pacing Chart/Curriculum MAP**

<b>Marking Period:</b>	2	<b>Unit Title:</b>	<b>Areas of Polygons</b>	<b>Pacing:</b>	November Week 4 December Week 1
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**Unit Summary:** In this unit, students discover the formulas to determine the areas of parallelograms, triangles, and trapezoids. Students can use these formulas to determine the area of composite shapes by decomposition. Students also determine the vertical or horizontal distance between two coordinate points by examining the x or y value that is different.

**Objectives:** Students will be able to:

- find the area of parallelograms.
- find the areas of triangles.
- find the areas of trapezoids.
- find the areas of composite figures.
- draw polygons in the coordinate plane.
- find distances in the coordinate plane.
- solve real-life problems.

**Essential Questions:**

- How can you derive a formula for the area of a parallelogram?
- How can you derive a formula for the area of a triangle?

- How can you derive a formula for the area of a trapezoid?
- How can you find the lengths of lines in a coordinate plane?

**Common Core State Standards/Learning Targets:**

- 6.G.A.1: Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.
- 6.G.A.3: Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.

**Interdisciplinary Connections/Including 21st Century Themes and Skills:**

21st Century Life and Career Standards: 9.2.8.B.1 Research careers within the 16 Career Clusters® and determine attributes of career success, 9.3.ST.6 Demonstrate technical skills needed in a chosen STEM field.

21st Century Career Ready Practices:

CRP2. Apply appropriate academic and technical skills.

CRP4. Communicate clearly and effectively and with reason.

CRP7. Employ valid and reliable research strategies.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

Geography: 4.2- Discuss the history of the Flatiron (or Fuller) Building in New York City. Discuss the Bermuda Triangle and locate it on a map.

Overview of Activities	Teacher's Guide/ Resources	Core Instructional Materials	Technology Infusion
<p>4.1 Areas of Parallelograms  4.2 Areas of Triangles  4.3 Areas of Trapezoids  4.4 Polygons in the Coordinate Plane</p>	<p>Curriculum Map  Teacher's Guide Chapter 4 p.150-187  Big Ideas website  Desmos.com  IXL</p>	<p>Student Textbook  p.150-187   Record and Practice  Journal  p. 75-94   Graph Paper</p>	<ul style="list-style-type: none"> <li>● Smart Board Applications</li> <li>● Google Applications</li> <li>● Billy Bug Game</li> <li>● BigIdeasMath.com</li> <li>● ixl.com <ul style="list-style-type: none"> <li>○ FF.3-FF.4</li> <li>○ FF.6</li> </ul> </li> </ul>

Formative Assessment Plan	Summative Assessment Plan
<p><i>Formative assessment informs instruction and is on going through a unit to determine how students are progressing with the high expectations of standards.</i></p> <p><b>Suggested activities to assess student progress:</b>  Weekly Homework Completion  Classwork &amp; Basic Skill Practice  Corrections &amp; Reflections  BigIdeasMath.com daily assessments  Kahoot/Quizizz daily assessments  Self-reflection</p>	<p><i>Summative assessment is an opportunity for students to demonstrate mastery of the skills taught during a particular unit.</i></p> <p><b>Final Assessment/Benchmark/Project:</b>  4.1-4.2 Mid Quiz  4.3-4.4 End Quiz  Chapter 4 Test  Chapter 4 Standards Assessment</p> <p><b>Suggested skills to be assessed:</b>  Determine areas of parallelograms, triangles, and trapezoids.  Determine areas of composite figures. Determine the horizontal or vertical distance between two points in the coordinate plane.</p>

## Differentiation

Special Education	ELL	At Risk	Gifted and Talented
<ul style="list-style-type: none"> <li>• RTI</li> <li>• Modify and accommodate as listed in student's IEP or 504 plan</li> <li>• Utilize effective amount of wait time</li> <li>• Hold high expectations</li> <li>• Communicate directions clearly and concisely and repeat, reword, modify as necessary.</li> <li>• Utilize open-ended questioning techniques</li> <li>• Utilize scaffolding to support instruction.</li> <li>• Chunk tasks into smaller components</li> <li>• Provide step by step instructions</li> <li>• Model and use visuals as often as possible</li> <li>• Utilize extended time and/or reduce amount of items given for homework, quizzes, and tests.</li> <li>• Teach Tiers 1,2, and 3 words to assist students' understanding of instructional texts.</li> <li>• Utilize a variety of formative</li> </ul>	<ul style="list-style-type: none"> <li>• RTI</li> <li>• Speech/Language Therapy</li> <li>• Rosetta Stone</li> <li>• Hold high expectations</li> <li>• Provide English/Spanish Dictionary for use</li> <li>• Place with Spanish speaking teacher/paraprofessional as available</li> <li>• Learn/Utilize/Display some words in the students' native language</li> <li>• Invite student to after school tutoring sessions</li> <li>• Basic Skills Instruction</li> <li>• Utilize formative assessments to drive instruction</li> <li>• Translate printed communications for parents in native language</li> <li>• Hold conferences with translator present</li> <li>• Utilize additional NJDOE resources/recommendations</li> <li>• Review Special Education listing for additional recommendations</li> <li>• Establish a consistent and daily routine</li> </ul>	<ul style="list-style-type: none"> <li>• RTI Tiered Interventions following RTI framework</li> <li>• Support instruction with RTI intervention resources</li> <li>• Provide after school tutoring services</li> <li>• Basic Skills Instruction</li> <li>• Hold high expectations</li> <li>• Utilize Go Math! RTI strategies</li> <li>• Fountas and Pinnell Phonics</li> <li>• Hold parent conferences fall and spring</li> <li>• Make modifications to instructional plans based on I and RS Plan.</li> <li>• Develop a record system to encourage good behavior and completion of work.</li> <li>• Establish a consistent and daily routine.</li> </ul>	<ul style="list-style-type: none"> <li>• Organize the curriculum to include more elaborate, complex, and in-depth study of major ideas and problems through Compacting.</li> <li>• Allow for the development and application of productive thinking skills to enable students to re-conceptualize existing knowledge and/or generate new knowledge.</li> <li>• Enable students to explore continually changing knowledge and information and develop the attitude that knowledge is worth pursuing in an open world.</li> <li>• Encourage exposure to, selection and use of appropriate and specialized resources.</li> <li>• Promote self-initiated and self-directed learning and growth.</li> <li>• Provide for the development of self-understanding of one's relationships with people, societal institutions, nature and culture.</li> <li>• Continue to offer Accelerated</li> </ul>

<p>assessments to drive next point of instruction/differentiated instructional practices.</p> <ul style="list-style-type: none"><li>● Create rubrics/allow students to assist with task, so that all are aware of expectations.</li><li>● Create modified assessments.</li><li>● Allow students to utilize online books, when available, to listen to oral recorded reading.</li><li>● Provide individualized assistance as necessary.</li><li>● Allow for group work (strategically selected) and collaboration as necessary.</li><li>● Utilize homework recorder within SIS.</li><li>● Allow for copies of notes to be shared out.</li><li>● Utilize assistive technology as appropriate.</li><li>● Provide meaningful feedback and utilize teachable moments.</li><li>● Utilize graphic organizers</li><li>● Introduce/review study skills</li><li>● Provide reading material at or slightly above students' reading levels.</li><li>● Utilize manipulatives as necessary.</li><li>● Establish a consistent and daily routine</li></ul>			<p>Mathematics 7 (7th grade) and Algebra 1 (8th grade).</p>
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**Quinton Township School District  
Mathematics  
Grade 6**

**Pacing Chart/Curriculum MAP**

<b>Marking Period:</b>	2	<b>Unit Title:</b>	<b>Ratios and Rates</b>	<b>Pacing:</b>	December Weeks 1-2 January Weeks 1-2
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**Unit Summary:** In this unit, students are introduced to the concepts of ratios and rates. Using models, students compare ratios and rates. Students begin to work with percents. They create percents by creating equivalent ratios out of 100. Students create algorithms to find percent of a number and the whole given the percent. Using equivalent ratios, students also convert between different units of measurement.

**Objectives:** Students will be able to:

- understand the concept of a ratio.
- use ratios to describe the relationship between two quantities.
- use ratio tables to find equivalent ratios.
- understand the concepts of rates and unit rates.
- write unit rates.
- compare ratios.
- compare unit rates.
- graph ordered pairs to compare ratios and rates.
- write percents as fractions with denominators of 100.

- write fractions as percents.
- find percent of numbers.
- use conversion factors (rates) to convert units of measurement.
- find the whole given the part and the percent.
- solve real-life problems.

**Essential Questions:**

- How can you represent a relationship between two quantities?
- How can you find two ratios that describe the same relationship?
- How can you use rates to describe changes in real-life problems?
- How can you compare two ratios?
- What is the connection between ratios, fractions, and percents?
- How can you use mental math to find the percent of a number?
- How can you compare lengths between the customary and metric systems?

**Common Core State Standards/Learning Targets:**

- 6.RP.A.1: Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities
- 6.RP.A.2: Understand the concept of a unit rate  $a/b$  associated with a ratio  $a:b$  with  $b \neq 0$ , and use rate language in the context of a ratio relationship.
- 6.RP.A.3: Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.
  - 6.RP.A.3.A: Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.
  - 6.RP.A.3.B: Solve unit rate problems including those involving unit pricing and constant speed.
  - 6.RP.A.3.C: Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means  $30/100$  times the quantity); solve problems involving finding the whole, given a part and the percent.



- 6.RP.A.3.D: Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.

**Interdisciplinary Connections/Including 21st Century Themes and Skills:**

21st Century Life and Career Standards:

9.1.8.A.1 Explain the meaning and purposes of taxes and tax deductions and why fees for various benefits (e.g., medical benefits) are taken out of pay.

9.1.8.A.6 Explain how income affects spending decisions.

21st Century Career Ready Practices:

CRP2. Apply appropriate academic and technical skills.

CRP3. Attend to personal health and financial well-being.

CRP4. Communicate clearly and effectively and with reason.

CRP5. Consider the environmental, social and economic impacts of decisions.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

Science: 5.3 - Investigate the rate in which space junk travels.

LAL: 5.4 - Investigate the meaning of the word “percent”.

Financial Literacy: 5.6 - Determine the tax or tip.

History: 5.7 - Discover the origins of customary measurement.

Overview of Activities	Teacher’s Guide/ Resources	Core Instructional Materials	Technology Infusion
<p>5.1 Ratios 5.2 Ratio Tables 5.3 Rates 5.4 Comparing and Graphing Ratios 5.5 Percents</p>	<p>Curriculum Map Teacher’s Guide Chapter 5 p.188-245 Big Ideas website Desmos.com IXL</p>	<p>Student Textbook p.188-245  Record and Practice Journal</p>	<ul style="list-style-type: none"> <li>● Smart Board Applications</li> <li>● Google Applications</li> <li>● Bad Date Video</li> <li>● BigIdeasMath.com</li> <li>● ixl.com</li> </ul>

<p>5.6 Solving Percent Problems 5.7 Converting Measures</p>		<p>p. 95-124</p>	<ul style="list-style-type: none"> <li>○ R.1-R.8</li> <li>○ S.1-S.5</li> <li>○ S.9, T.8</li> </ul>
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Formative Assessment Plan	Summative Assessment Plan
<p><i>Formative assessment informs instruction and is on going through a unit to determine how students are progressing with the high expectations of standards.</i></p> <p><b>Suggested activities to assess student progress:</b>            Percent Foldable            Weekly Homework Completion            Classwork &amp; Basic Skill Practice            Corrections &amp; Reflections            BigIdeasMath.com daily assessments            Kahoot/Quizizz daily assessments            Self-reflection</p>	<p><i>Summative assessment is an opportunity for students to demonstrate mastery of the skills taught during a particular unit.</i></p> <p><b>Final Assessment/Benchmark/Project:</b>            5.1-5.4 Mid Quiz            5.5-5.7 End Quiz            Chapter 5 Test            Chapter 5 Standards Assessment            Winter MAP Benchmark Assessment</p> <p><b>Suggested skills to be assessed:</b>            Writing and comparing ratios using ratio tables and unit rates.            Converting between fractions and percents. Finding percent of a number Finding the whole given the percent. Converting between units of measurement.</p>

## Differentiation

Special Education	ELL	At Risk	Gifted and Talented
<ul style="list-style-type: none"> <li>• RTI</li> <li>• Modify and accommodate as listed in student's IEP or 504 plan</li> <li>• Utilize effective amount of wait time</li> <li>• Hold high expectations</li> <li>• Communicate directions clearly and concisely and repeat, reword, modify as necessary.</li> <li>• Utilize open-ended questioning techniques</li> <li>• Utilize scaffolding to support instruction.</li> <li>• Chunk tasks into smaller components</li> <li>• Provide step by step instructions</li> <li>• Model and use visuals as often as possible</li> <li>• Utilize extended time and/or reduce amount of items given for homework, quizzes, and tests.</li> <li>• Teach Tiers 1,2, and 3 words to assist students' understanding of instructional texts.</li> <li>• Utilize a variety of formative assessments to drive next point of instruction/differentiated instructional practices.</li> <li>• Create rubrics/allow students</li> </ul>	<ul style="list-style-type: none"> <li>• RTI</li> <li>• Speech/Language Therapy</li> <li>• Rosetta Stone</li> <li>• Hold high expectations</li> <li>• Provide English/Spanish Dictionary for use</li> <li>• Place with Spanish speaking teacher/paraprofessional as available</li> <li>• Learn/Utilize/Display some words in the students' native language</li> <li>• Invite student to after school tutoring sessions</li> <li>• Basic Skills Instruction</li> <li>• Utilize formative assessments to drive instruction</li> <li>• Translate printed communications for parents in native language</li> <li>• Hold conferences with translator present</li> <li>• Utilize additional NJDOE resources/recommendations</li> <li>• Review Special Education listing for additional recommendations</li> <li>• Establish a consistent and daily routine</li> </ul>	<ul style="list-style-type: none"> <li>• RTI Tiered Interventions following RTI framework</li> <li>• Support instruction with RTI intervention resources</li> <li>• Provide after school tutoring services</li> <li>• Basic Skills Instruction</li> <li>• Hold high expectations</li> <li>• Utilize Go Math! RTI strategies</li> <li>• Fountas and Pinnell Phonics</li> <li>• Hold parent conferences fall and spring</li> <li>• Make modifications to instructional plans based on I and RS Plan.</li> <li>• Develop a record system to encourage good behavior and completion of work.</li> <li>• Establish a consistent and daily routine.</li> </ul>	<ul style="list-style-type: none"> <li>• Organize the curriculum to include more elaborate, complex, and in-depth study of major ideas and problems through Compacting.</li> <li>• Allow for the development and application of productive thinking skills to enable students to re-conceptualize existing knowledge and/or generate new knowledge.</li> <li>• Enable students to explore continually changing knowledge and information and develop the attitude that knowledge is worth pursuing in an open world.</li> <li>• Encourage exposure to, selection and use of appropriate and specialized resources.</li> <li>• Promote self-initiated and self-directed learning and growth.</li> <li>• Provide for the development of self-understanding of one's relationships with people, societal institutions, nature and culture.</li> <li>• Continue to offer Accelerated Mathematics 7 (7th grade) and Algebra 1 (8th grade).</li> </ul>

<p>to assist with task, so that all are aware of expectations.</p> <ul style="list-style-type: none"><li>• Create modified assessments.</li><li>• Allow students to utilize online books, when available, to listen to oral recorded reading.</li><li>• Provide individualized assistance as necessary.</li><li>• Allow for group work (strategically selected) and collaboration as necessary.</li><li>• Utilize homework recorder within SIS.</li><li>• Allow for copies of notes to be shared out.</li><li>• Utilize assistive technology as appropriate.</li><li>• Provide meaningful feedback and utilize teachable moments.</li><li>• Utilize graphic organizers</li><li>• Introduce/review study skills</li><li>• Provide reading material at or slightly above students' reading levels.</li><li>• Utilize manipulatives as necessary.</li><li>• Establish a consistent and daily routine</li></ul>			
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**Quinton Township School District  
Mathematics  
Grade 6**

**Pacing Chart/Curriculum MAP**

<b>Marking Period:</b>	3	<b>Unit Title:</b>	<b>Integers and the Coordinate Plane</b>	<b>Pacing:</b>	January Weeks 3-4 February Week 1
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**Unit Summary:** Students become familiar with the term “integer” and investigate numbers less than 0. Using a number line, student can compare rational numbers and explore absolute value. Using their understanding of negative integers, students create and utilize coordinate graphs with four quadrants.

**Objectives:** Students will be able to:

- understand positive and negative integers and use them to describe real-life situations.
- graph integers on a number line.
- use a number line to compare positive and negative integers.
- use a number line to order positive and negative integers for real-life situations.
- understand positive and negative numbers and use them to describe real-life situations.
- graph numbers on a number line.
- find the absolute value of numbers.
- use absolute value to compare numbers in real-life situations.
- describe the locations of points in the coordinate plane.
- plot points in the coordinate plane given ordered pairs.

- find distances between points in the coordinate plane.
- understand reflections of points in the coordinate plane.

**Essential Questions:**

- How can you represent numbers that are less than 0?
- How can you use a number line to order real life events?
- How can you use a number line to compare positive and negative fractions and decimals?
- How can you graph and locate points that contain negative numbers in the coordinate plane?

**Common Core State Standards/Learning Targets:**

- 6.NS.C.5: Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.
- 6.NS.C.6: Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.
  - 6.NS.C.6.A: Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g.,  $-(-3) = 3$ , and that 0 is its own opposite.
  - 6.NS.C.6.B: Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.
  - 6.NS.C.6.C: Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.
- 6.NS.C.7: Understand ordering and absolute value of rational numbers.
  - 6.NS.C.7.A: Interpret statements of inequality as statements about the relative position of two numbers on a

number line diagram.

- 6.NS.C.7.B: Write, interpret, and explain statements of order for rational numbers in real-world contexts.
- 6.NS.C.7.C: Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation.
- 6.NS.C.7.D: Distinguish comparisons of absolute value from statements about order.
- 6.NS.C.8: Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.

**Interdisciplinary Connections/Including 21st Century Themes and Skills:**

21st Century Life and Career Standards:

9.1.8.A.6 Explain how income affects spending decisions

21st Century Career Ready Practices:

CRP3 Attend to personal health and financial well-being

CRP4 Communicate clearly and effectively and with reason

CRP6 Demonstrate creativity and innovation

CRP8 Utilize critical thinking to make sense of problems and persevere in solving them

Science: 6.1 - Discuss the difference between fahrenheit and celsius. 6.2 - Relating between integers and take off countdown for a space shuttle. 6.3 - Research a Chinook wind. 6.4 - Research submersibles and they relate to absolute value.

History: Relate timelines to integers.

Overview of Activities	Teacher's Guide/ Resources	Core Instructional Materials	Technology Infusion
<p>6.1 Integers 6.2 Comparing and Ordering Integers</p>	<p>Curriculum Map Teacher's Guide Chapter 6 p.246-291</p>	<p>Student Textbook p.246-291</p>	<ul style="list-style-type: none"> <li>● Smart Board Applications</li> <li>● Google</li> </ul>

<p>6.3 Fractions and Decimals on the Number Line          6.4 Absolute Value          6.5 The Coordinate Plane</p>	<p>Big Ideas website          Desmos.com          IXL</p>	<p>Record and Practice Journal          p. 125-148</p>	<p>Applications</p> <ul style="list-style-type: none"> <li>● Billy Bug 2 Game</li> <li>● Number Balls Game</li> <li>● BigIdeasMath.com</li> <li>● ixl.com             <ul style="list-style-type: none"> <li>○ M.1-M.6</li> <li>○ P.1-P.3</li> <li>○ X.2-X.5</li> <li>○ DD.4</li> </ul> </li> </ul>
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Formative Assessment Plan	Summative Assessment Plan
<p><i>Formative assessment informs instruction and is on going through a unit to determine how students are progressing with the high expectations of standards.</i></p> <p><b>Suggested activities to assess student progress:</b>            Mystery Coordinate Graphing Pictures            Weekly Homework Completion            Classwork &amp; Basic Skill Practice            Corrections &amp; Reflections            BigIdeasMath.com daily assessments            Kahoot/Quizizz daily assessments            Self-reflection</p>	<p><i>Summative assessment is an opportunity for students to demonstrate mastery of the skills taught during a particular unit.</i></p> <p><b>Final Assessment/Benchmark/Project:</b>            6.1-6.3 Mid Quiz            6.4-6.5 End Quiz            Chapter 6 Test            Chapter 6 Standards Assessment            Timeline Project</p>



**Suggested skills to be assessed:**

Write integers for a given situation. Compare and order integers and rational numbers. Determine the absolute value of a rational number. Plot points in all four quadrants of the coordinate plane.

## Differentiation

Special Education	ELL	At Risk	Gifted and Talented
<ul style="list-style-type: none"> <li>• RTI</li> <li>• Modify and accommodate as listed in student's IEP or 504 plan</li> <li>• Utilize effective amount of wait time</li> <li>• Hold high expectations</li> <li>• Communicate directions clearly and concisely and repeat, reword, modify as necessary.</li> <li>• Utilize open-ended questioning techniques</li> <li>• Utilize scaffolding to support instruction.</li> <li>• Chunk tasks into smaller components</li> <li>• Provide step by step instructions</li> <li>• Model and use visuals as often as possible</li> <li>• Utilize extended time and/or reduce amount of items given</li> </ul>	<ul style="list-style-type: none"> <li>• RTI</li> <li>• Speech/Language Therapy</li> <li>• Rosetta Stone</li> <li>• Hold high expectations</li> <li>• Provide English/Spanish Dictionary for use</li> <li>• Place with Spanish speaking teacher/paraprofessional as available</li> <li>• Learn/Utilize/Display some words in the students' native language</li> <li>• Invite student to after school tutoring sessions</li> <li>• Basic Skills Instruction</li> <li>• Utilize formative assessments to drive instruction</li> <li>• Translate printed communications for parents in native language</li> <li>• Hold conferences with translator present</li> <li>• Utilize additional NJDOE resources/recommendations</li> </ul>	<ul style="list-style-type: none"> <li>• RTI Tiered Interventions following RTI framework</li> <li>• Support instruction with RTI intervention resources</li> <li>• Provide after school tutoring services</li> <li>• Basic Skills Instruction</li> <li>• Hold high expectations</li> <li>• Utilize Go Math! RTI strategies</li> <li>• Fountas and Pinnell Phonics</li> <li>• Hold parent conferences fall and spring</li> <li>• Make modifications to instructional plans based on I and RS Plan.</li> <li>• Develop a record system to encourage good behavior and completion of work.</li> <li>• Establish a consistent and daily routine.</li> </ul>	<ul style="list-style-type: none"> <li>• Organize the curriculum to include more elaborate, complex, and in-depth study of major ideas and problems through Compacting.</li> <li>• Allow for the development and application of productive thinking skills to enable students to re-conceptualize existing knowledge and/or generate new knowledge.</li> <li>• Enable students to explore continually changing knowledge and information and develop the attitude that knowledge is worth pursuing in an open world.</li> <li>• Encourage exposure to, selection and use of appropriate and specialized resources.</li> <li>• Promote self-initiated and self-directed learning and</li> </ul>

<p>for homework, quizzes, and tests.</p> <ul style="list-style-type: none"> <li>• Teach Tiers 1,2, and 3 words to assist students' understanding of instructional texts.</li> <li>• Utilize a variety of formative assessments to drive next point of instruction/differentiated instructional practices.</li> <li>• Create rubrics/allow students to assist with task, so that all are aware of expectations.</li> <li>• Create modified assessments.</li> <li>• Allow students to utilize online books, when available, to listen to oral recorded reading.</li> <li>• Provide individualized assistance as necessary.</li> <li>• Allow for group work (strategically selected) and collaboration as necessary.</li> <li>• Utilize homework recorder within SIS.</li> <li>• Allow for copies of notes to be shared out.</li> <li>• Utilize assistive technology as appropriate.</li> <li>• Provide meaningful feedback and utilize teachable moments.</li> <li>• Utilize graphic organizers</li> <li>• Introduce/review study skills</li> <li>• Provide reading material at or slightly above students' reading levels.</li> <li>• Utilize manipulatives as necessary.</li> <li>• Establish a consistent and daily routine</li> </ul>	<ul style="list-style-type: none"> <li>• Review Special Education listing for additional recommendations</li> <li>• Establish a consistent and daily routine</li> </ul>		<p>growth.</p> <ul style="list-style-type: none"> <li>• Provide for the development of self-understanding of one's relationships with people, societal institutions, nature and culture.</li> <li>• Continue to offer Accelerated Mathematics 7 (7th grade) and Algebra 1 (8th grade).</li> </ul>
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**Quinton Township School District  
Mathematics  
Grade 6**

**Pacing Chart/Curriculum MAP**

<b>Marking Period:</b>	3	<b>Unit Title:</b>	<b>Equations and Inequalities</b>	<b>Pacing:</b>	February Weeks 2-4 March Week 1
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**Unit Summary:** Students continue working on skills learned from Chapter 3. They extend their knowledge of expressions to create equations. Using a balance model, students discover the steps to solve one-step equations and inequalities. Once these skills are mastered, students will be able to solve multi-step equations in 7th grade.

**Objectives:** Students will be able to:

- write word sentences as equations.
- use addition or subtraction to solve equations.
- use substitution to check answers.
- use multiplication or division to solve equations.
- identify independent and dependent variables.
- write equations in two variables.
- use tables and graphs to analyze the relationship between two variables.
- write word sentences as inequalities.
- use a number line to graph the solution set of inequalities.

- use inequalities to represent real-life situations.
- use addition or subtraction to solve inequalities.
- use multiplication or division to solve inequalities.
- solve real-life problems.

**Essential Questions:**

- How does rewriting a word problem help you solve the word problem?
- How can you use addition, subtraction, multiplication, or division to solve an equation?
- How can you write an equation in two variables?
- How can you use a number line to represent solutions of an inequality?
- How can you use addition, subtraction, multiplication, or division to solve an inequality?

**Common Core State Standards/Learning Targets:**

- 6.EE.B.5: Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.
- 6.EE.B.6: Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.
- 6.EE.B.7: Solve real-world and mathematical problems by writing and solving equations of the form  $x + p = q$  and  $px = q$  for cases in which  $p$ ,  $q$  and  $x$  are all nonnegative rational numbers.
- 6.EE.B.8: Write an inequality of the form  $x > c$  or  $x < c$  to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form  $x > c$  or  $x < c$  have infinitely many solutions; represent solutions of such inequalities on number line diagrams.
- 6.EE.B.9: Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs

and tables, and relate these to the equation.

- 6.RP.A.3: Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.
  - 6.RP.A.3.A: Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.

**Interdisciplinary Connections/Including 21st Century Themes and Skills:**

21st Century Life and Career Standards:

9.1.8.A.2 Relate how career choices, education choices, skills, entrepreneurship, and economic conditions affect income.

9.1.8.A.5 Relate how the demand for certain skills determines an individual’s earning power.

9.1.8.A.6 Explain how income affects spending decisions.

21st Century Career Ready Practices:

CRP1. Act as a responsible and contributing citizen and employee.

CRP2. Apply appropriate academic and technical skills.

CRP3. Attend to personal health and financial well-being.

CRP4. Communicate clearly and effectively and with reason.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

CRP10. Plan education and career paths aligned to personal goals.

LAL: 7.1 - Students rewrite word problems to make them easier to solve. Students create their own word problems.

Financial Literacy: 7.4 - Discuss the difference between hourly pay, salary, and commission.

Overview of Activities	Teacher’s Guide/ Resources	Core Instructional Materials	Technology Infusion
7.1 Writing Equations in One Variable 7.2 Solving Equations Using Addition	Coins Packet Curriculum Map Teacher’s Guide Chapter 7 p.292-351	Student Textbook p.292-351	<ul style="list-style-type: none"> <li>● Smart Board Applications</li> <li>● Google Applications</li> </ul>

<p>and Subtraction  <b>7.3</b> Solving Equations Using Multiplication and Division  <b>7.4</b> Writing Equations in Two Variables  <b>7.5</b> Writing and Graphing Inequalities  <b>7.6</b> Solving Inequalities using Addition and Subtraction  <b>7.7</b> Solving Inequalities using Multiplication and Division</p>	<p>Big Ideas website  Desmos.com  IXL</p>	<p>Record and Practice Journal  p. 149-178</p>	<ul style="list-style-type: none"> <li>● BigIdeasMath.com</li> <li>● ixl.com <ul style="list-style-type: none"> <li>○ Z.3-Z.8</li> <li>○ BB.1-BB.10</li> <li>○ AA.1-AA.3</li> </ul> </li> </ul>
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<b>Formative Assessment Plan</b>	<b>Summative Assessment Plan</b>
<p><i>Formative assessment informs instruction and is on going through a unit to determine how students are progressing with the high expectations of standards.</i></p> <p><b>Suggested activities to assess student progress:</b>  Weekly Homework Completion  Classwork &amp; Basic Skill Practice  Corrections &amp; Reflections  BigIdeasMath.com daily assessments  Kahoot/Quizizz daily assessments  Self-reflection</p>	<p><i>Summative assessment is an opportunity for students to demonstrate mastery of the skills taught during a particular unit.</i></p> <p><b>Final Assessment/Benchmark/Project:</b>  7.1-7.4 Mid Quiz  7.5-7.7 End Quiz  Chapter 7 Test  Chapter 7 Standards Assessment</p> <p><b>Suggested skills to be assessed:</b>  Writing and solving one-step equations. Write equations in two variables. Writing and solving one-step inequalities. Graphing solutions to inequalities.</p>

## Differentiation

Special Education	ELL	At Risk	Gifted and Talented
<ul style="list-style-type: none"> <li>• RTI</li> <li>• Modify and accommodate as listed in student's IEP or 504 plan</li> <li>• Utilize effective amount of wait time</li> <li>• Hold high expectations</li> <li>• Communicate directions clearly and concisely and repeat, reword, modify as necessary.</li> <li>• Utilize open-ended questioning techniques</li> <li>• Utilize scaffolding to support instruction.</li> <li>• Chunk tasks into smaller components</li> <li>• Provide step by step instructions</li> <li>• Model and use visuals as often as possible</li> <li>• Utilize extended time and/or reduce amount of items given for homework, quizzes, and tests.</li> <li>• Teach Tiers 1,2, and 3 words to assist students' understanding of instructional texts.</li> <li>• Utilize a variety of formative</li> </ul>	<ul style="list-style-type: none"> <li>• RTI</li> <li>• Speech/Language Therapy</li> <li>• Rosetta Stone</li> <li>• Hold high expectations</li> <li>• Provide English/Spanish Dictionary for use</li> <li>• Place with Spanish speaking teacher/paraprofessional as available</li> <li>• Learn/Utilize/Display some words in the students' native language</li> <li>• Invite student to after school tutoring sessions</li> <li>• Basic Skills Instruction</li> <li>• Utilize formative assessments to drive instruction</li> <li>• Translate printed communications for parents in native language</li> <li>• Hold conferences with translator present</li> <li>• Utilize additional NJDOE resources/recommendations</li> <li>• Review Special Education listing for additional recommendations</li> <li>• Establish a consistent and daily routine</li> </ul>	<ul style="list-style-type: none"> <li>• RTI Tiered Interventions following RTI framework</li> <li>• Support instruction with RTI intervention resources</li> <li>• Provide after school tutoring services</li> <li>• Basic Skills Instruction</li> <li>• Hold high expectations</li> <li>• Utilize Go Math! RTI strategies</li> <li>• Fountas and Pinnell Phonics</li> <li>• Hold parent conferences fall and spring</li> <li>• Make modifications to instructional plans based on I and RS Plan.</li> <li>• Develop a record system to encourage good behavior and completion of work.</li> <li>• Establish a consistent and daily routine.</li> </ul>	<ul style="list-style-type: none"> <li>• Organize the curriculum to include more elaborate, complex, and in-depth study of major ideas and problems through Compacting.</li> <li>• Allow for the development and application of productive thinking skills to enable students to re-conceptualize existing knowledge and/or generate new knowledge.</li> <li>• Enable students to explore continually changing knowledge and information and develop the attitude that knowledge is worth pursuing in an open world.</li> <li>• Encourage exposure to, selection and use of appropriate and specialized resources.</li> <li>• Promote self-initiated and self-directed learning and growth.</li> <li>• Provide for the development of self-understanding of one's relationships with people, societal institutions, nature and culture.</li> <li>• Continue to offer Accelerated</li> </ul>

<p>assessments to drive next point of instruction/differentiated instructional practices.</p> <ul style="list-style-type: none"><li>● Create rubrics/allow students to assist with task, so that all are aware of expectations.</li><li>● Create modified assessments.</li><li>● Allow students to utilize online books, when available, to listen to oral recorded reading.</li><li>● Provide individualized assistance as necessary.</li><li>● Allow for group work (strategically selected) and collaboration as necessary.</li><li>● Utilize homework recorder within SIS.</li><li>● Allow for copies of notes to be shared out.</li><li>● Utilize assistive technology as appropriate.</li><li>● Provide meaningful feedback and utilize teachable moments.</li><li>● Utilize graphic organizers</li><li>● Introduce/review study skills</li><li>● Provide reading material at or slightly above students' reading levels.</li><li>● Utilize manipulatives as necessary.</li><li>● Establish a consistent and daily routine</li></ul>			<p>Mathematics 7 (7th grade) and Algebra 1 (8th grade).</p>
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**Quinton Township School District  
Mathematics  
Grade 6**

**Pacing Chart/Curriculum MAP**

<b>Marking Period:</b>	3	<b>Unit Title:</b>	<b>Surface Area and Volume</b>	<b>Pacing:</b>	March Weeks 2-4
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**Unit Summary:** In this unit, students are introduced to three-dimensional figures. They learn the parts of three-dimensional figures and how to draw them. Using nets, students develop strategies for determining the surface area of the figures. Students also determine the formula for finding the volume of rectangular prisms.

**Objectives:** Students will be able to:

- draw three dimensional figures.
- find the number of faces, edges, and vertices of solids.
- use nets to represent prisms.
- find the surface area of prisms.
- use nets to represent pyramids.
- find the surface areas of pyramids.
- find the volume of prisms with fractional edge lengths by using models.
- find the volume of prisms by using formulas.

- solve real-life problems.

**Essential Questions:**

- How can you draw three-dimensional figures?
- How can you find the area of the entire surface of a prism?
- How can you use a net to find the surface area of a pyramid?
- How can you find the volume of a rectangular prism with fractional edge lengths?

**Common Core State Standards/Learning Targets:**

- 6.G.A.2: Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas  $V = lwh$  and  $V = bh$  to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.
- 6.G.A.4: Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.

**Interdisciplinary Connections/Including 21st Century Themes and Skills:**

21st Century Career Ready Practices:

CRP2. Apply appropriate academic and technical skills.

CRP4. Communicate clearly and effectively and with reason.

CRP6. Demonstrate creativity and innovation.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

Overview of Activities	Teacher's Guide/ Resources	Core Instructional Materials	Technology Infusion
<p>8.1 Three Dimensional Figures  8.2 Surface Areas of Prisms  8.3 Surface Areas of Pyramids  8.4 Volumes of Rectangular Prisms</p>	<p>Curriculum Map  Teacher's Guide Chapter 8 p.352-387  Big Ideas website  Desmos.com  IXL</p>	<p>Student Textbook  p.352-387   Record and Practice Journal  p. 179-196</p>	<ul style="list-style-type: none"> <li>● Smart Board Applications</li> <li>● Google Applications</li> <li>● BigIdeasMath.com</li> <li>● ixl.com <ul style="list-style-type: none"> <li>○ EE.1-EE.4</li> <li>○ FF.14-FF.16</li> <li>○ 8th Grade T.3</li> </ul> </li> </ul>

Formative Assessment Plan	Summative Assessment Plan
<p><i>Formative assessment informs instruction and is on going through a unit to determine how students are progressing with the high expectations of standards.</i></p> <p><b>Suggested activities to assess student progress:</b>  Weekly Homework Completion  Classwork &amp; Basic Skill Practice  Corrections &amp; Reflections  BigIdeasMath.com daily assessments  Kahoot/Quizizz daily assessments</p>	<p><i>Summative assessment is an opportunity for students to demonstrate mastery of the skills taught during a particular unit.</i></p> <p><b>Final Assessment/Benchmark/Project:</b>  8.1-8.2 Mid Quiz  8.3-8.4 End Quiz  Chapter 8 Test  Chapter 8 Standards Assessment</p>

Self-reflection	<p><b>Suggested skills to be assessed:</b>  Determine surface areas of prisms and pyramids. Determine the volume of rectangular prisms.</p>
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**Differentiation**

Special Education	ELL	At Risk	Gifted and Talented
<ul style="list-style-type: none"> <li>• RTI</li> <li>• Modify and accommodate as listed in student's IEP or 504 plan</li> <li>• Utilize effective amount of wait time</li> <li>• Hold high expectations</li> <li>• Communicate directions clearly and concisely and repeat, reword, modify as necessary.</li> <li>• Utilize open-ended questioning techniques</li> <li>• Utilize scaffolding to support instruction.</li> <li>• Chunk tasks into smaller components</li> <li>• Provide step by step instructions</li> <li>• Model and use visuals as often as possible</li> <li>• Utilize extended time and/or reduce amount of items given for homework, quizzes, and tests.</li> </ul>	<ul style="list-style-type: none"> <li>• RTI</li> <li>• Speech/Language Therapy</li> <li>• Rosetta Stone</li> <li>• Hold high expectations</li> <li>• Provide English/Spanish Dictionary for use</li> <li>• Place with Spanish speaking teacher/paraprofessional as available</li> <li>• Learn/Utilize/Display some words in the students' native language</li> <li>• Invite student to after school tutoring sessions</li> <li>• Basic Skills Instruction</li> <li>• Utilize formative assessments to drive instruction</li> <li>• Translate printed communications for parents in native language</li> <li>• Hold conferences with translator present</li> <li>• Utilize additional NJDOE resources/recommendations</li> <li>• Review Special Education listing for additional</li> </ul>	<ul style="list-style-type: none"> <li>• RTI Tiered Interventions following RTI framework</li> <li>• Support instruction with RTI intervention resources</li> <li>• Provide after school tutoring services</li> <li>• Basic Skills Instruction</li> <li>• Hold high expectations</li> <li>• Utilize Go Math! RTI strategies</li> <li>• Fountas and Pinnell Phonics</li> <li>• Hold parent conferences fall and spring</li> <li>• Make modifications to instructional plans based on I and RS Plan.</li> <li>• Develop a record system to encourage good behavior and completion of work.</li> <li>• Establish a consistent and daily routine.</li> </ul>	<ul style="list-style-type: none"> <li>• Organize the curriculum to include more elaborate, complex, and in-depth study of major ideas and problems through Compacting.</li> <li>• Allow for the development and application of productive thinking skills to enable students to re-conceptualize existing knowledge and/or generate new knowledge.</li> <li>• Enable students to explore continually changing knowledge and information and develop the attitude that knowledge is worth pursuing in an open world.</li> <li>• Encourage exposure to, selection and use of appropriate and specialized resources.</li> <li>• Promote self-initiated and self-directed learning and growth.</li> <li>• Provide for the development</li> </ul>

<ul style="list-style-type: none"> <li>● Teach Tiers 1,2, and 3 words to assist students' understanding of instructional texts.</li> <li>● Utilize a variety of formative assessments to drive next point of instruction/differentiated instructional practices.</li> <li>● Create rubrics/allow students to assist with task, so that all are aware of expectations.</li> <li>● Create modified assessments.</li> <li>● Allow students to utilize online books, when available, to listen to oral recorded reading.</li> <li>● Provide individualized assistance as necessary.</li> <li>● Allow for group work (strategically selected) and collaboration as necessary.</li> <li>● Utilize homework recorder within SIS.</li> <li>● Allow for copies of notes to be shared out.</li> <li>● Utilize assistive technology as appropriate.</li> <li>● Provide meaningful feedback and utilize teachable moments.</li> <li>● Utilize graphic organizers</li> <li>● Introduce/review study skills</li> <li>● Provide reading material at or slightly above students' reading levels.</li> <li>● Utilize manipulatives as necessary.</li> <li>● Establish a consistent and daily routine</li> </ul>	<ul style="list-style-type: none"> <li>● recommendations</li> <li>● Establish a consistent and daily routine</li> </ul>		<p>of self-understanding of one's relationships with people, societal institutions, nature and culture.</p> <ul style="list-style-type: none"> <li>● Continue to offer Accelerated Mathematics 7 (7th grade) and Algebra 1 (8th grade).</li> </ul>
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**Quinton Township School District  
Mathematics  
Grade 6**

**Pacing Chart/Curriculum MAP**

<b>Marking Period:</b>	4	<b>Unit Title:</b>	Statistical Measures	<b>Pacing:</b>	April Weeks 1-3
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**Unit Summary:** In this unit, students investigate statistics. They determine that a question is statistical if they expect to receive different responses. Using the data collected by statistical questions, students determine and analyze measures of center and measures of variation.

**Objectives:** Students will be able to:

- recognize statistical questions.
- use dot plots to display numerical data.
- understand the concept of the mean of a set of data.
- find the mean of data sets.
- compare and interpret the means of data sets.
- understand the concept of measures of center.

- find the median and mode of data sets.
- find the range of data sets.
- find the interquartile range of data sets.
- check for outliers in data sets.
- understand the meaning of *mean absolute deviation*.
- find the mean absolute deviation of data sets.

**Essential Questions:**

- How can you tell whether a question is a statistical question?
- How can you find the average value of a data set?
- In what other ways can you describe an average of a data set?
- How can you describe the spread of a data set?
- How can you use the distances between each data value and the mean of a data set to measure the spread of a data set?

**Common Core State Standards/Learning Targets:**

- 6.SP.A.1: Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers.
- 6.SP.A.2: Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.
- 6.SP.A.3: Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.
- 6.SP.B.4: Display numerical data in plots on a number line, including dot plots, histograms, and box plots.
- 6.SP.B.5: Summarize numerical data sets in relation to their context, such as by:
  - 6.SP.B.5.A: Reporting the number of observations.
  - 6.SP.B.5.B: Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.
  - 6.SP.B.5.C: Giving quantitative measures of center (median and/or mean) and variability (interquartile range

and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.

**Interdisciplinary Connections/Including 21st Century Themes and Skills:**

21st Century Life and Career Standards:

9.3.ST-SM.4 Apply critical thinking skills to review information, explain statistical analysis, and to translate, interpret and summarize research and statistical data.

21st Century Career Ready Practices:

CRP2. Apply appropriate academic and technical skills.

CRP4. Communicate clearly and effectively and with reason.

CRP7. Employ valid and reliable research strategies.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

Health: 9.1 - Students determine their heart rate and analyze their data.

Visual and Performing Arts: Student recite the Mean, Median, Mode Poem

Overview of Activities	Teacher's Guide/ Resources	Core Instructional Materials	Technology Infusion
<p><b>9.1</b> Introduction to Statistics  <b>9.2</b> Mean  <b>9.3</b> Measures of Center  <b>9.4</b> Measures of Variation  <b>9.5</b> Mean Absolute Deviation</p>	<p>Curriculum Map            Teacher's Guide Chapter 9 p.388-431            Big Ideas website            Desmos.com            IXL</p>	<p>Student Textbook            p.388-432             Record and Practice            Journal</p>	<ul style="list-style-type: none"> <li>● Smart Board Applications</li> <li>● Google Applications</li> <li>● BigIdeasMath.com</li> <li>● ixl.com               <ul style="list-style-type: none"> <li>○ HH.1-HH.4</li> </ul> </li> </ul>



	Mean, Median, Mode Poem	p. 197-218	
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Formative Assessment Plan	Summative Assessment Plan
<p><i>Formative assessment informs instruction and is on going through a unit to determine how students are progressing with the high expectations of standards.</i></p> <p><b>Suggested activities to assess student progress:</b>            Weekly Homework Completion            Classwork &amp; Basic Skill Practice            Corrections &amp; Reflections            BigIdeasMath.com daily assessments            Kahoot/Quizizz daily assessments            Self-reflection</p>	<p><i>Summative assessment is an opportunity for students to demonstrate mastery of the skills taught during a particular unit.</i></p> <p><b>Final Assessment/Benchmark/Project:</b>            9.1-9.3 Mid Quiz            9.4-9.5 End Quiz            Chapter 9 Test            Chapter 9 Standards Assessment</p> <p><b>Suggested skills to be assessed:</b>            Determine if a question is statistical. Determine and analyze measures of center and measures of variation of a data set. Display data in a dot plot.</p>

**Differentiation**

Special Education	ELL	At Risk	Gifted and Talented
<ul style="list-style-type: none"> <li>• RTI</li> <li>• Modify and accommodate as listed in student's IEP or 504 plan</li> <li>• Utilize effective amount of wait time</li> <li>• Hold high expectations</li> <li>• Communicate directions clearly and concisely and repeat, reword, modify as necessary.</li> <li>• Utilize open-ended questioning techniques</li> <li>• Utilize scaffolding to support instruction.</li> <li>• Chunk tasks into smaller components</li> <li>• Provide step by step instructions</li> <li>• Model and use visuals as often as possible</li> <li>• Utilize extended time and/or reduce amount of items given for homework, quizzes, and tests.</li> <li>• Teach Tiers 1,2, and 3 words to assist students' understanding of instructional texts.</li> <li>• Utilize a variety of formative assessments to drive next point of instruction/differentiated instructional practices.</li> <li>• Create rubrics/allow students to assist with task, so that all are aware of expectations.</li> <li>• Create modified assessments.</li> </ul>	<ul style="list-style-type: none"> <li>• RTI</li> <li>• Speech/Language Therapy</li> <li>• Rosetta Stone</li> <li>• Hold high expectations</li> <li>• Provide English/Spanish Dictionary for use</li> <li>• Place with Spanish speaking teacher/paraprofessional as available</li> <li>• Learn/Utilize/Display some words in the students' native language</li> <li>• Invite student to after school tutoring sessions</li> <li>• Basic Skills Instruction</li> <li>• Utilize formative assessments to drive instruction</li> <li>• Translate printed communications for parents in native language</li> <li>• Hold conferences with translator present</li> <li>• Utilize additional NJDOE resources/recommendations</li> <li>• Review Special Education listing for additional recommendations</li> <li>• Establish a consistent and daily routine</li> </ul>	<ul style="list-style-type: none"> <li>• RTI Tiered Interventions following RTI framework</li> <li>• Support instruction with RTI intervention resources</li> <li>• Provide after school tutoring services</li> <li>• Basic Skills Instruction</li> <li>• Hold high expectations</li> <li>• Utilize Go Math! RTI strategies</li> <li>• Fountas and Pinnell Phonics</li> <li>• Hold parent conferences fall and spring</li> <li>• Make modifications to instructional plans based on I and RS Plan.</li> <li>• Develop a record system to encourage good behavior and completion of work.</li> <li>• Establish a consistent and daily routine.</li> </ul>	<ul style="list-style-type: none"> <li>• Organize the curriculum to include more elaborate, complex, and in-depth study of major ideas and problems through Compacting.</li> <li>• Allow for the development and application of productive thinking skills to enable students to re-conceptualize existing knowledge and/or generate new knowledge.</li> <li>• Enable students to explore continually changing knowledge and information and develop the attitude that knowledge is worth pursuing in an open world.</li> <li>• Encourage exposure to, selection and use of appropriate and specialized resources.</li> <li>• Promote self-initiated and self-directed learning and growth.</li> <li>• Provide for the development of self-understanding of one's relationships with people, societal institutions, nature and culture.</li> <li>• Continue to offer Accelerated Mathematics 7 (7th grade) and Algebra 1 (8th grade).</li> </ul>

<ul style="list-style-type: none"><li>• Allow students to utilize online books, when available, to listen to oral recorded reading.</li><li>• Provide individualized assistance as necessary.</li><li>• Allow for group work (strategically selected) and collaboration as necessary.</li><li>• Utilize homework recorder within SIS.</li><li>• Allow for copies of notes to be shared out.</li><li>• Utilize assistive technology as appropriate.</li><li>• Provide meaningful feedback and utilize teachable moments.</li><li>• Utilize graphic organizers</li><li>• Introduce/review study skills</li><li>• Provide reading material at or slightly above students' reading levels.</li><li>• Utilize manipulatives as necessary.</li><li>• Establish a consistent and daily routine</li></ul>			
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**Quinton Township School District  
Mathematics  
Grade 6**

**Pacing Chart/Curriculum MAP**

<b>Marking Period:</b>	4	<b>Unit Title:</b>	<b>Data Displays</b>	<b>Pacing:</b>	April Week 4 May Weeks 1-2
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**Unit Summary:** After students learn how to collect and analyze data from Chapter 9, the students will learn how to display their data in this unit. They will create stem-and-leaf plots, histograms, or box-and-whisker plots depending on which display would be appropriate for the type of data they collected. Students can compare their data displays to other data sets.

- Objectives:** Students will be able to:
- make and interpret stem-and-leaf plots.
  - make histograms.
  - use histograms to analyze data.
  - describe shapes of distributions.

- choose appropriate measures of center and variation to represent data sets.
- make box-and-whisker plots.
- compare box-and-whisker plots.

**Essential Questions:**

- How can you use place values to represent data graphically?
- How can you use intervals, tables, and graphs to organize data?
- How can you describe the shape of the distribution of a data set?
- How can you use quartiles to represent data graphically?

**Common Core State Standards/Learning Targets:**

- 6.SP.A.2: Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.
- 6.SP.B.4: Display numerical data in plots on a number line, including dot plots, histograms, and box plots.
- 6.SP.B.5: Summarize numerical data sets in relation to their context, such as by:
  - 6.SP.B.5.C: Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.
  - 6.SP.B.5.D: Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.

**Interdisciplinary Connections/Including 21st Century Themes and Skills:**

21st Century Life and Career Standards:

9.3.ST.2 Use technology to acquire, manipulate, analyze and report data.

9.3.ST-SM.4 Apply critical thinking skills to review information, explain statistical analysis, and to translate, interpret and summarize research and statistical data.

21st Century Career Ready Practices:

CRP2. Apply appropriate academic and technical skills.

CRP4. Communicate clearly and effectively and with reason.

CRP6. Demonstrate creativity and innovation.

CRP7. Employ valid and reliable research strategies.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

CRP11. Use technology to enhance productivity.

History: 10.2 - Students use the ages of Presidents when they first entered the White House and the ages of their First Ladies to create stem-and-leaf plots to compare data.

Overview of Activities	Teacher's Guide/ Resources	Core Instructional Materials	Technology Infusion
<p><b>10.1</b> Stem and Leaf Plots  <b>10.2</b> Histograms  <b>10.3</b> Shapes of Distributions  <b>10.4</b> Box-and-Whiskers Plot</p>	<p>Curriculum Map            Teacher's Guide Chapter 10            p.432-473            Big Ideas website            Desmos.com            IXL</p>	<p>Student Textbook            p.432-473             Record and Practice Journal            p. 219-238</p>	<ul style="list-style-type: none"> <li>● Smart Board Applications</li> <li>● Google Applications</li> <li>● BigIdeasMath.com</li> <li>● ixl.com               <ul style="list-style-type: none"> <li>○ GG.11</li> <li>○ GG.12</li> <li>○ GG.18</li> <li>○ GG.19</li> </ul> </li> </ul>

Formative Assessment Plan	Summative Assessment Plan
<p><i>Formative assessment informs instruction and is on going through a unit to determine how students are progressing with the high expectations of standards.</i></p> <p><b>Suggested activities to assess student progress:</b>            Weekly Homework Completion            Classwork &amp; Basic Skill Practice            Corrections &amp; Reflections            BigIdeasMath.com daily assessments            Kahoot/Quizizz daily assessments            Self-reflection</p>	<p><i>Summative assessment is an opportunity for students to demonstrate mastery of the skills taught during a particular unit.</i></p> <p><b>Final Assessment/Benchmark/Project:</b>            10.1-10.2 Mid Quiz            10.3-10.4 End Quiz            Chapter 10 Test            Chapter 10 Standards Assessment            Statistics Project            Spring MAP Benchmark Assessment</p> <p><b>Suggested skills to be assessed:</b>            Creating data displays such as stem-and-leaf plots, histograms, and box-and-whisker plots. Determine the shape of distributions.</p>

**Differentiation**

Special Education	ELL	At Risk	Gifted and Talented
<ul style="list-style-type: none"> <li>• RTI</li> <li>• Modify and accommodate as listed in student's IEP or 504 plan</li> <li>• Utilize effective amount of wait time</li> <li>• Hold high expectations</li> <li>• Communicate directions clearly and concisely and repeat, reword, modify as necessary.</li> <li>• Utilize open-ended questioning techniques</li> <li>• Utilize scaffolding to support instruction.</li> <li>• Chunk tasks into smaller components</li> <li>• Provide step by step instructions</li> <li>• Model and use visuals as often as possible</li> <li>• Utilize extended time and/or reduce amount of items given for homework, quizzes, and tests.</li> <li>• Teach Tiers 1,2, and 3 words to assist students' understanding of instructional texts.</li> <li>• Utilize a variety of formative assessments to drive next point of instruction/differentiated instructional practices.</li> <li>• Create rubrics/allow students to assist with task, so that all are aware of expectations.</li> <li>• Create modified</li> </ul>	<ul style="list-style-type: none"> <li>• RTI</li> <li>• Speech/Language Therapy</li> <li>• Rosetta Stone</li> <li>• Hold high expectations</li> <li>• Provide English/Spanish Dictionary for use</li> <li>• Place with Spanish speaking teacher/paraprofessional as available</li> <li>• Learn/Utilize/Display some words in the students' native language</li> <li>• Invite student to after school tutoring sessions</li> <li>• Basic Skills Instruction</li> <li>• Utilize formative assessments to drive instruction</li> <li>• Translate printed communications for parents in native language</li> <li>• Hold conferences with translator present</li> <li>• Utilize additional NJDOE resources/recommendations</li> <li>• Review Special Education listing for additional recommendations</li> <li>• Establish a consistent and daily routine</li> </ul>	<ul style="list-style-type: none"> <li>• RTI Tiered Interventions following RTI framework</li> <li>• Support instruction with RTI intervention resources</li> <li>• Provide after school tutoring services</li> <li>• Basic Skills Instruction</li> <li>• Hold high expectations</li> <li>• Utilize Go Math! RTI strategies</li> <li>• Fountas and Pinnell Phonics</li> <li>• Hold parent conferences fall and spring</li> <li>• Make modifications to instructional plans based on I and RS Plan.</li> <li>• Develop a record system to encourage good behavior and completion of work.</li> <li>• Establish a consistent and daily routine.</li> </ul>	<ul style="list-style-type: none"> <li>• Organize the curriculum to include more elaborate, complex, and in-depth study of major ideas and problems through Compacting.</li> <li>• Allow for the development and application of productive thinking skills to enable students to re-conceptualize existing knowledge and/or generate new knowledge.</li> <li>• Enable students to explore continually changing knowledge and information and develop the attitude that knowledge is worth pursuing in an open world.</li> <li>• Encourage exposure to, selection and use of appropriate and specialized resources.</li> <li>• Promote self-initiated and self-directed learning and growth.</li> <li>• Provide for the development of self-understanding of one's relationships with people, societal institutions, nature and culture.</li> <li>• Continue to offer Accelerated Mathematics 7 (7th grade) and Algebra 1 (8th grade).</li> </ul>



<p>assessments.</p> <ul style="list-style-type: none"><li>● Allow students to utilize online books, when available, to listen to oral recorded reading.</li><li>● Provide individualized assistance as necessary.</li><li>● Allow for group work (strategically selected) and collaboration as necessary.</li><li>● Utilize homework recorder within SIS.</li><li>● Allow for copies of notes to be shared out.</li><li>● Utilize assistive technology as appropriate.</li><li>● Provide meaningful feedback and utilize teachable moments.</li><li>● Utilize graphic organizers</li><li>● Introduce/review study skills</li><li>● Provide reading material at or slightly above students' reading levels.</li><li>● Utilize manipulatives as necessary.</li><li>● Establish a consistent and daily routine</li></ul>			
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